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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/501,462
Filing Date: December 13, 2004
Appellant(s): NAKAMURA ET AL.

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For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/31/2008 appealing from the Office action mailed 1/28/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct except for the following rejections are now withdrawn:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. The rejection of claims 1,2,4, and 6 on the ground of non-statutory obviousness-type double patenting as being

unpatentable over claims 1, 5, 7, 11, and 16 of copending Application No. 09/936,317 in view of the machine translation of JP 200-219609A by Sato et al. is herein in withdrawn. Application No. 09/936,317 is now abandoned, rendering said rejection moot.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 5,961,990	Delrieu et al.	10-1999
JP 2000-219609 A	Sato et al.	8-2000

Machine translation of JP 2000-219609 A.

Derwent Abstract of JP 2000-219609 A, Derwent Accession No. 2000-621486.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. **Claims 1, 2, 4, and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Delrieu et al. (US 5,961,990) in view of Sato et al. (JP 2000-219609 A).

Claim 1 is directed to a water-in-oil emulsified composition consisting essentially of (a) 0.1-20% by weight organophilic clay mineral, (b) 10-70% by weight oil component, 0.1-10% by weight emulsifier having an HLB value of not more than 7, and (d) 0.1-90% by weight microgel having an average particle size of 0.1 to 1,000 micrometers, wherein said emulsified composition contains 65 to 85% by weight water phase parts which consist of water, aqueous components, and said microgel. The microgel is said to be obtained by dissolving a hydrophilic compound selected from the group consisting of agar, carrageenan, curdlan, gelatin, gellan gum, and alginic acid, having agelation ability in water or an aqueous component, letting it cool down and solidify to form a gel, and pulverizing said gel, wherein said microgel contains only water or aqueous components and said hydrophilic compounds. Claim 2 further limits the particle size of the microgel to 1-300 micrometers. Claims 4 and 6 are directed to cosmetic compositions of claims 1-2. For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially

Comment [J1]: I changed this rejection slightly to account for the after final amendment. For example, I added the case law about "consisting essentially of" instead of the comprising.

of" will be construed as equivalent to "comprising." See, e.g., *PPG*, 156 F.3d at 1355, 48 USPQ2d at 1355.

Delrieu et al. teaches water-in-oil cosmetic compositions that contain agar gel particles (see column 4, lines 6-9 and columns 11-12, lines 63-67, 1-17). Delrieu et al. also specifies that the gel beads can be present in a cosmetic composition in 0.1 to 90% by weight of the total composition (see column 12, lines 18-22) and that the gel particles can range in size between 50-10,000 micrometers (see column 5, lines 42-52).

Delrieu et al. teaches that recipes and ingredients for cosmetic compositions are well known to those of ordinary skill in the art (see column 12, lines 3-9). However, Delrieu et al. does not explicitly teach cosmetic compositions where the other ingredients are specifically disclosed, or the specific percentages for the components.

Sato et al. teaches water-in-oil emulsified compositions comprising a silicone oil phase, an organically modified clay mineral, and an emulsion aid having an HLB of 7 or less, and is important for its disclosure of an organophilic clay mineral and emulsifier having an HLB value of 7 or less in the oil phase (see abstract). The clay mineral is present in the composition in 0.1 to 10% by weight, and the emulsifier is present in 0.1 to 15% by weight (see page 10, section 33 and page 11, section 42). This significantly overlaps with the % weights listed in the instant claims for these components. Sato et al. also discloses that the compositions are useful as cosmetic compositions and afford high stability at low temperatures (see abstract).

It is well known in the art that blending a solid into the oil phase of a water-in-oil emulsion increases the viscosity of the oil phase, resulting in emulsions with higher

stability. Therefore, it would be obvious to one of ordinary skill in the art, at the time the invention was made, to include an emulsifier and an organophilic clay mineral in the oil phase of a water-in-oil emulsion as taught in Sato et al., to increase the viscosity of the oil phase and the overall stability of the emulsion of Delrieu et al.

(10) Response to Argument

Appellant's arguments in the Brief filed 8/31/2008 averring that an erroneous legal standard was applied in interpreting "consisting essentially of" as "comprising" are not convincing. As stated in the 6/18/2008 Advisory Action, for purposes of applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., *PPG*, 156 F.3d at 1355, 48 USPQ2d at 1355. While the Appellant points out that the page 1, lines 7-16 of the Specification sets forth the basic and novel characteristics of the invention (a water-in-oil emulsified composition that exhibits good emulsified states, does not change over different temperatures and/or time, has superior stability, and gives a non-sticky, fresh, and good tactile sensation during use, as well as an emulsified cosmetic using this composition), it is not clear that the presence of the unlisted ingredients taught by Delrieu et al. (i.e. the restraining polymer and the active agent) affect the basic and novel properties of the instant invention. The Appellants have not presented any evidence demonstrating that the presence of a restraining polymer with bound active agent in the microgel portion of the composition changes the overall properties of the

emulsified composition. Furthermore, Delrieu et al. teaches that the restraining polymer binds the active agent (see column 4 lines 10-16), and that restraining polymer is water-soluble, and dissolved in water mixed with agar to form the agar gel (see column 4, lines 27-30, 62-67). Thus, the restraining polymer with the bound active agent is broadly interpreted as an "aqueous component" as recited in the amended claim 1, because it is soluble in water, and the "comprising of" standard is not actually applied.

Appellant's arguments in the Brief filed 8/31/2008 averring that the restraining polymer with the bound active agent can not be equated with the aqueous component as recited in the instant claim 1 are not convincing. The Examiner notes that Delrieu et al. clearly teach the restraining polymer with the bound active agent are dissolved in water mixed with agar to form the agar gel. Therefore, because the restraining polymer and active agent are dissolved in the aqueous phase instead of being distinct particles or phases separate from the aqueous phase, the restraining polymer with the bound active agent are part of the aqueous phase. Thus, one of ordinary skill in the art would reasonably interpret the restraining polymer with the bound active agent as an "aqueous component" as claimed.

The Appellant further argues that the microgel of claim 1 is set forth by product by process, and that the process steps of:

- (1) dissolving in water or an aqueous component a hydrophilic compound having gelation ability and consisting of one or more members selected from the group consisting of agar, carrageenan, curdlan, gelatin, gellan gum, and alginic acid;

- (2) cooling said mixture below the gelation temperature to form a gel, then pulverizing said gel; and
- (3) wherein said microgel is emulsified in a composition containing 65 to 85% of water phase parts which consist of water, aqueous component, and said microgel,

are critical to the to the invention. The arguments are not convincing. First, as stated *supra*, the Appellant does not provide any evidence that the restraining polymer and active agent materially affect the characteristics of the emulsified composition and thus are equated as part of the aqueous component. Second, while Delrieu et al. does not cool the aqueous solution containing the agar below the gelation temperature to form a gel, which is then pulverized, the process steps taught by Delrieu et al. result in materially the same microgel as claimed. Delrieu et al. teaches that the hot agar solution is partially cooled to a temperature above its gelation temperature, then discharged through a needle to form drops which are then exposed to hydrophobic liquid below the gelation temperature of the agar to form agar beads of overlapping particle size with the pulverized microgel particles of the instant claims. Thus, while the steps are not identical, it is the position of the Examiner that the gel bead and pulverized microgel particles are materially the same.

The Appellant further argues that the beads of Delrieu et al. are not crushed to form a microgel, and that one of ordinary skill in the art would not crush the gel beads since crushing of the beads would result in release of the active components. The Examiner agrees on this point, however respectfully points out that the gel beads taught

by Delrieu et al. do not need to be further crushed; the process step of discharging the agar gel through the needle produces gel beads in overlapping particle size with the pulverized microgel particles as claimed. The Appellant also points to Table 1 on page 25 of the specification, comparing crushed microgels versus microgels that were not crushed, and Table 3, page 28 demonstrating the superior properties of the crushed gel. The Examiner notes that the non-crushed gels were formed by mixing and then allowed to stand, which is significantly different than the process taught by Delrieu et al., and results in a materially different product (i.e. non-discrete particles).

The Appellant further argues that there is no disclosure in the Delrieu et al. to form an emulsified composition containing 65 to 85% by weight of water phase parts consisting of water, aqueous components, and said microgel. The Examiner notes that Delrieu et al. teach that the gel-complex particles can be incorporated into cosmetic formulations such as water-in-oil emulsions, and that the recipes for such compositions are well known to those skilled in the art and can be found in many publications in the field. Delrieu et al. further teach that the gel beads can be used in any desired concentration to provide an effective amount of active agent upon application, for example 0.1 to 90%, overlapping with the range of water phase parts as claimed (see column 11, line 63 to column 12, lines 24). Appellant's evidence presented on page 28, Table 3 of the instant specification demonstrating the instability of emulsified composition comprising 92% by weight water phase compared to 65% water phase is not commensurate with the scope of the prior art, and only serves to demonstrate a water phase weight percentage outside of the range taught by the prior art is unstable.

The water phase is the microgel, as shown on Table 1, page 25 of the specification.

Accordingly, this aspect of the invention is still rendered obvious by Delrieu et al.

Appellant's arguments in the Brief filed 8/31/2008 averring that there is no teaching, suggestion or motivation in the references relied upon to combine them in the manner suggest by the Examiner are not convincing. Specifically, the Appellant asserts that the reason given by the Examiner is identical to the statements in the Specification on page 1, lines 19-23 stating water-in-oil type emulsified cosmetic compositions have been obtained by increasing the viscosity of the oil phase by blending in solid and semisolid oil components. The Examiner respectfully disagrees. As stated in the rejection of record "[it] is well known in the art that blending a solid into the oil phase of a water-in-oil emulsion increases the viscosity of the oil phase, resulting in emulsions with higher stability." The solid is the organophilic clay material, and not solid or semi-solid oil, which as disclosed on page 1, lines 23-25 of the specification, provides an undesirable oil and sticky sensation during use. Appellant's statement that "it can be seen that some compositions containing the claimed organophilic clay mineral may produce a stable emulsion but fail to have satisfactory properties of non-stickiness, smoothness, or moistening sensation" is conclusionary at best. The comparative examples referred to (see Specification, Table 3, page 28) with unsatisfactory properties are not commensurate with the scope of the combined prior art. The comparative examples include emulsified compositions wherein the water phases present (which are the microgels disclosed on Table 1, page 25) is higher than taught by the prior art and compositions where the microgel is formed by mixing and allowing to stand without

pulverizing, which is materially different that the gel bead particles taught by the prior art. Thus, the unsatisfactory properties are attributed to other factors outside of the scope of the prior art.

Motivation to combine the references is also found in Delrieu et al. Delrieu et al. teach that the gel-complex particles can be incorporated into cosmetic formulations such as water-in-oil emulsions, and that the recipes for such compositions are well known to those skilled in the art and can be found in many publications in the field (see column 11, line 63 to column 12, lines 17). Sato et al. is considered to be an example of such reference, and teaches the emulsifier and oragnophilic clay material. Accordingly, the cited prior art still render the instant invention obvious.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jody L. Karol/
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